

Response to USPTO Office Action dated July 21, 2005
Serial No.: 10/080,310

In the claims:

Please amend claims 1, 2, 4-10, 12, 14, 18 and 22 as follows:

1. (Currently Amended) A method of integrating multiple military and civil data link networks radios, and automatically selecting one of the available networks a data link radio, and then routing a message to the selected data link radio, the method comprising the steps of:
 - a) providing at least one data link network radio from the multiple military and civil data link radios, each data link network radio comprising a means to transmit and receive civil and military messages;
 - b) sending and/or receiving the message through a physical interface between the each data link radio communication-data-link-equipment and a host computer;
 - c) formatting the message for delivery to or from the selected data link network radio; and
 - d) routing the message to or from the selected data link network radio based on dynamic routing criteria;
 - ① repeating steps c) and d) for a next message.
2. (Currently Amended) The method of claim 1 further comprising the step of translating civil data link network radio messages into military data link network radio formats and translating military data link network radio messages into civil data link network radio formats.

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3. (Original) The method of claim 1 further comprising the step of extracting information from the civil and military messages for use in constructing ad hoc messages.

4. (Currently Amended) The method of claim 3 wherein the ad hoc messages comprise ~~air traffic control information~~ aeronautical operational control (AOC) messages and air traffic control (ATC) messages.

5. (Currently Amended) The method of claim 1 wherein the dynamic routing criteria comprise message priority, ~~message~~ security, ~~message~~ urgency, message size and message bandwidth.

6. (Currently Amended) The method of claim 1 wherein the step of routing the message to ~~either~~ the selected data link ~~network~~ radio comprises routing the message to an alternate data link ~~network~~ radio if the selected data link ~~network~~ radio malfunctions.

7. (Currently Amended) The method of claim 1 further comprising the step of determining a number of available data link ~~network~~ radios, a type of each available data link ~~network~~ radio, and a working status of each available data link ~~network~~ radio.

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8. (Currently Amended) The method of claim 7 further comprising the step of computing a single communication performance indicator for the ~~gach~~ available data link networks ~~radl~~.

9. (Currently Amended) The method of claim 7-8 further comprising the step of constructing and transmitting a communication status message that comprises the computed communication performance indicator.

10. (Currently Amended) A method of integrating multiple military and civil end systems, and automatically transmitting messages to each end system from the military and civil end systems and receiving messages from ~~the~~ each end system, the method comprising the steps of:

a) transmitting and/or receiving the messages through a physical interface between an a selected end system from the military and civil end systems, apparatus and a host computer;

b) formatting the messages for delivery to or from the selected end system apparatus; and

c) routing the messages to or from the selected end system based on dynamic routing criteria.

11. (Original) The method of claim 10 further comprising the step of translating civil end system messages into military end system message formats and translating military end system messages into civil end system message formats.

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12. (Currently Amended) The method of claim 10 further comprising the step of extracting information from each end-system message from the messages for use in constructing an ad hoc message.

13. (Original) The method of claim 12 wherein the ad hoc message comprises operational control and maintenance information.

14. (Currently Amended) The method of claim 12 further comprising the step of analyzing the extracted information from the each end-system message to determine trend information over a predefined time period.

15. (Original) The method of claim 14 further comprising the step of constructing a trend message.

16. (Original) The method of claim 14 further comprising the step of computing alerts and decision aides from the extracted information based upon predefined criteria.

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17. (Original) The method of claim 16 further comprising the step of constructing an alert and decision value message.

18. (Currently Amended) The method of claim 10 wherein the dynamic routing criteria comprise message priority, message security, message urgency, message size and message bandwidth.

19. (Original) The method of claim 10 further comprising the step of determining a number of available end systems, a type of each available end system, and a working status of each available end system.

20. (Original) The method of claim 19 further comprising the step of computing a single system performance indicator for the available end systems.

21. (Original) The method of claim 19 further comprising the step of constructing and transmitting a computed system performance indicator message.

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22. (Currently Amended) An apparatus for integrating military and civil data link networks radios and automatically selecting and routing a message to a selected data link radio, the apparatus comprising:

at least one data link radio from said military and civil data link radios,
each data link radio comprising a means to transmit and receive civil and military messages;

a physical interface between communication data link equipment and a host computer for sending and receiving the message;

a means for formatting the message for delivery to or from the selected data link radio; and
a router for routing the message to or from the selected data link radio based on dynamic routing criteria.